PATENT APPLICATION (M)

## RESPONSE UNDER 37 CFR §1.116 EXPEDITED PROCEDURE TECHNOLOGY CENTER ART UNIT 3742

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yasutaka ITO Group Art Unit: 3742

Application No.: 09/916,682 Examiner: S. Paik

Filed: July 30, 2001 Docket No.: 110580.01

For: CERAMIC HEATER

## REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION

Director of the U.S. Patent and Trademark Office Washington, D.C. 20231

Sir:

In reply to the December 31, 2002 Office Action, the shortened statutory period for response having been extended by the attached Petition for Extension of Time, reconsideration of the rejection is respectfully requested in light of the following remarks.

Claims 1-8 are pending in this application.

The Office Action admits that Kano does not disclose or suggest a bending portion having a curvature radius within the range of 0.1mm to 20mm. However, the Office Action asserts that Koontz discloses this feature. Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine Koontz with Kano because none of Kano and Koontz recognize the problem solved by the subject matter recited in claims 1-8.

Kano is directed to resolving cold spots caused by the radiation cooling effect of the terminal member 10 used in semiconductor ceramic heaters. See col. 1, lines 11-35 and 46-65. Kano discloses providing heat to the terminal member to suppress the radiation cooling effect. See Fig. 3 and col. 5, lines 5-28. Kano does not recognize the problem associated with sharp turning points of the heating elements of ceramic heaters, and thus does not

suggest or look for solutions to the problem associated with the sharp turning points.

Koontz discloses vehicle windshields having heating elements. See col. 2, lines 44-56. Koontz does not contemplate use of its invention in any art other than transparencies made of glass, glass-ceramic or plastic. See col. 3, lines 55-57. Thus, one of ordinary skill in the semiconductor heater art would not have looked to Koontz to solve their problems, because Koontz does not suggest application to ceramic substrate made of nitride ceramics or carbide ceramics. See In re Clay, 966 F.2d at 659, 23 USPQ2d at 1060-1061 (Fed. Cir. 1992).

The Office Action has not identified any teaching or suggestion in Kano or Koontz to motivate one of ordinary skill to combine Koontz's windshield heating elements with Kano's ceramic heater. As is well-established, "obviousness can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination...the mere fact that the prior art may be modified in a manner suggested by the Examiner does not make the motivation obvious unless the prior art suggested the desirability of the motivation." In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

In view of the above, the Office Action is engaging in impermissible hindsight reconstruction using the present application as a roadmap to pick and choose features out of the prior art. One of ordinary skill in the art would not have been motivated to combine Koontz with Kano. Thus, the Office Action has not established a *prima facie* case of obviousness.

Applicant respectfully submits no one other than the inventor of the present application recognized the problem of cooling caused by corners of heating elements in semiconductor ceramic heaters. While Koontz may disclose to shape the corners of the heating elements in radius contours for the purpose of eliminating hot and cold spots, such a solution is without benefit when the problem is not recognized in the semiconductor ceramic

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heater art. As is well-established, a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. In re Spinnoble, 160 USPQ 237, 243 (CCPA 1969).

For at least the above reasons, the subject matter recited in claims 1-8 would not have been rendered obvious by Kano and Koontz, either individually or in combination.

Withdrawal of the rejection of claims 1-8 under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,

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Attachment:

Petition for Extension of Time

Date: April 30, 2003

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